

ABSTRACT

A design professional such as an interior designer, furniture sales associate or advertising designer or a consumer running a program at a client computer (i) interactively selects or specifies a background scene and furnishings or other objects, (ii) interactively previews these objects in a small low-quality perspective view image of the scene, and then (iii) utilizing the world wide web transmits the scene file to a server computer, (iv) this server then renders a typically larger high-quality version of the previewed scene, utilizing high-resolution objects to replace the stand-in objects used to render the preview image on the client computer, (v) which high-quality image is returned to the client computer for viewing. 3D models and related textures and maps are built for each object to be depicted in the virtual scenes. For transmission efficiency, the scene file transmitted to the server may contain only the name of stand-in models and textures used in the scene, rather than the actual geometry and maps, if these reside on the server. Images so produced serve to promote the sale of visually-attractive goods depicted by providing the designer and consumer with in-context visualization.